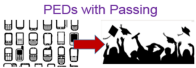


SWBAT

get ready for Newton's Laws test

Sep 4-7:31 AM



PEDs with Passing

Welcome!!!

H. Leslie Grebe
Room C-244

SECA CP Physics
Tuesday 5 April 2016

Centering
(quotes)

LESLIE WILL
✓ ASSEMBLE
✓ ATTENDANCE
✓ COLLECT QW.
- REVIEW
ANYTHING
BROUGHT

- HAVE
MORE
POINTS

- Show me SchoolView if you want phone in class...

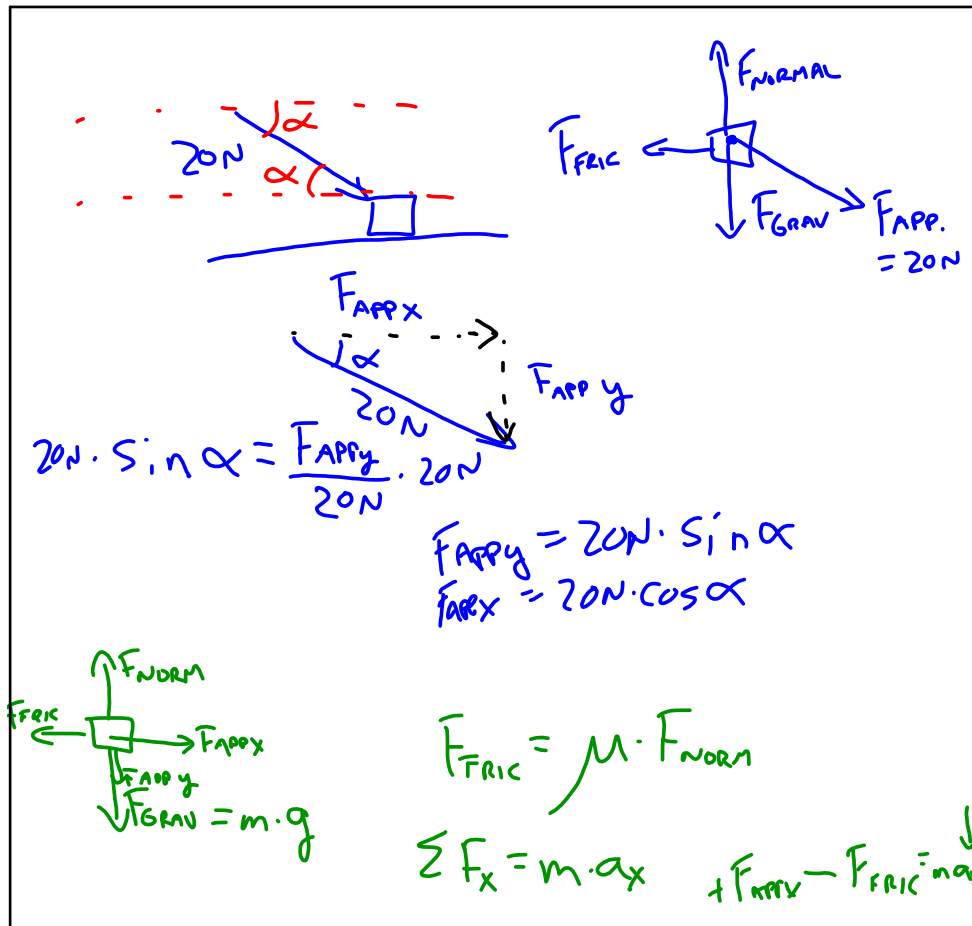
WORK Completed? Get it checked off!

Opening Activity: Quick Write

Look thru review packet

- What do you feel most confident about?
- What are you most confused about?

Sep 7-7:04 AM



Apr 5-9:51 AM

What we should have solid:

Memorize our ~~5~~⁸ vocab cards, units, vector or not, definition, formula

Be able to answer distance vs displacement questions

Be able to make measurements of real-life motion. Know what is likely to make timing things difficult and how to get more reliable timing results

Be able to convert between miles and meters, between hours, minutes, and seconds

Be able to calculate speed = dist/time and velocity = disp/time

Know what all of the symbols in the UAM equations stand for and mean

Be able to turn a UAM word problem into a list of knowns and unknowns

Be able to pick the equation with those 4 things in it

Be able to put the knowns into that equation

(Be able to solve for the unknown)

→ PROJECTILES: V_x IS CONSTANT; $a_y = -9.81\text{ m/s}^2$ ^{V_y CHANGES} PG 42

PG 43 TIME, Δt , CONNECTS x & y

PG 53

1ST LAW

PG 49 VECTORS INTO x & y , ADD VECTORS

PG 69

SOH-CAH-TOA

PG 59 DIFFERENCE BETWEEN MASS & WEIGHT

PG 61 NET FORCE

PG 63 FREE BODY DIAGRAMS

$$F = m \cdot a$$

PG 70 $F_f = \mu \cdot N$

QW every day to review - gather responses to front board.

Dec 4-9:15 AM

InterActive Notebook - Table of Contents			
Unit	Chapters	Date	
Left-Side Items	Page	Right-Side Items	Page
REFLECTION ON NOTES	2	Ed Adam Savage	3
HOW FAR FROM BRIDGE	4	"FORT STUEBEN"	5
REFLECTION ON NOTES	6	Hmwk: BASE UNITS	7
FP: DISTANCE & DISPLACEMENT	8	Hmwk: FP Displacement	9
DIAGRAM & STEPS	10	TIMING & ERROR	11
SUMMARY OF TIMING	12	How to BUILD a LAB	13
FP: CONVERTING SLOPE	14	Hmwk: FP Conversions	15
PR: VELOCITY & SPEED	16	Hmwk: FP SPEED & VELOCITY	17
SPEED WORD PROBLEMS	18	ALGEBRA FOR PHYSICS	19
LAB JOURNAL 10/7	20	LAB JOURNAL 10/8	21
...		Hmwk: FP GRAPH POSITION	23
LAB JOURNAL 10/12	24	EXPERIMENT RUBRIC	25
26	USE FOR PROTECT	27	
OBSERVATIONS OF CAR	28	FP: INTRO TO ACC.	29
REVIEW FOR TEST	30	BALL ON RAMP	31
VECTORS, DIRECTION	32	FP: BASIC ACC EXAMPLE	33
PRACTICE UAM	34	FP: INTRO TO UAM	35
FALLING OBJECTS PACKET	36	FP: INTRO TO FREEFALL	37
MY FREE FALL WORD PROBLEM	38	3-ACT FALLING GLOWSTICK	39
Toy popper experiment	40	Free fall class solutions	41
Launched vs. Dropped	42	FP: INTRO TO PROJECTILE MOTION	43
PROJECTILE SIMULATOR	44	FP: PROJECT MOTION PROBLEM	45
PROJECTILE PRACTICE PROB.	46	PROJECTILES PRACTICE	47
OUR VECTOR PRACTICE	48	FP - VECTOR COMPONENTS	49
VECTOR PACKET	50	NOTES ON ADDING VECTORS	51
MEASURE LAUNCHER	52	NOTES ON FINDING V.F.D.	53
OBSERVATIONS OF OBJECTS	54	RULES OF PHYSICS NOTES	55
NEWTON'S 1 ST LAW	58	CONFUSING QUANTITIES	59
WKSHET: 2-1	60	NET FORCE	61
PHET FORCES IN 1d	62	FREE-BODY DIAGRAMS	63
PACKET: F.B.D.	64	FINDING FRICTION IN CART	65
DATA/MEASURING CART	66	MYTHBUSTERS	67
MORE PROJECT?	68	VECTOR EXAMPLE	69
VECTOR ADDITION BY COMPONENTS	70	NORMAL VS. GRAVITY	71
PHET RAMP-SLIDING	72	FP: 2 ND LAW NOTES	73
2 ND LAW WORKSHEET	74	NEWTON'S 3 RD LAW	75

Sep 5-9:09 AM

NOTE CARD VOCAB

- FORCE

- MASS
kg

- SPEED

- ACCELERATION

- INERTIA

- WEIGHT
N

Mar 30-9:52 AM

TEST

- NEWTON'S LAWS FRICTION WORKSHEET
- ANSWERS
- PUSH PROBLEM
[LESLIE EXAMPLE & SOLUTION]
- "TEST RE-VIEW" = SECOND LAW WORKSHEET
- ANSWERS
- FREE BODY DIAGRAMS CLASS SOLUTIONS @ BACK

Apr 4-9:48 AM

BACK OF NOTEBOOK:

"PHYSICS CODE WORDS"

MAGNITUDE: SIZE, HOW BIG
VECTORS HAVE MAG. & DIRECTION

HORIZONTAL: SIDEWAYS, LEFT/RIGHT, X-DIRECTION

VERTICAL: UP/DOWN, Y-DIRECTION
"VERY TALL"

AT REST: VELOCITY = 0

CONSTANT SPEED/VELOCITY: BALANCED FORCES,
NET FORCE = 0

Σ : "SIGMA", SUM, TOTAL
ACCELERATION = 0
(+ & -) "NET"


Mar 30-9:46 AM

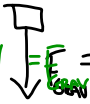
(MORE) DRAWING F.B.D.

$F = m \cdot a_{\text{NET}}$ $W = F_{\text{GRAV}} = m \cdot g$ $F_{\text{FAC}} = \mu \cdot F_{\text{NORMAL}}$

$F_{\text{NET}} = 9.81 \text{ N up}$ $\sum F_x = 0$ $\sum F_y = 0$

$F_{\text{GRAV}} = (1.0 \text{ kg} \times 9.81 \text{ m/s}^2) = 9.81 \text{ N down}$ $a_x = 0$ $a_y = 0$

2. 

3.  $\sum F_x = 0$ $\sum F_y = .10 \text{ N down}$

$m \cdot g = W = F_{\text{GRAV}} = .10 \text{ N}$ $a_x = 0$ $a_y =$

$-0.10 \text{ N} = m \cdot (-9.81 \text{ m/s}^2)$ $F_{\text{NET}} = m \cdot a_{\text{NET}}$

$\frac{-0.10 \text{ N}}{-9.81 \text{ m/s}^2} = \frac{m \cdot (-9.81 \text{ m/s}^2)}{-9.81 \text{ m/s}^2}$ $0.10 \text{ N} = 0.12 \text{ kg} \cdot a$

$m = .012 \text{ kg}$

Mar 30-9:59 AM